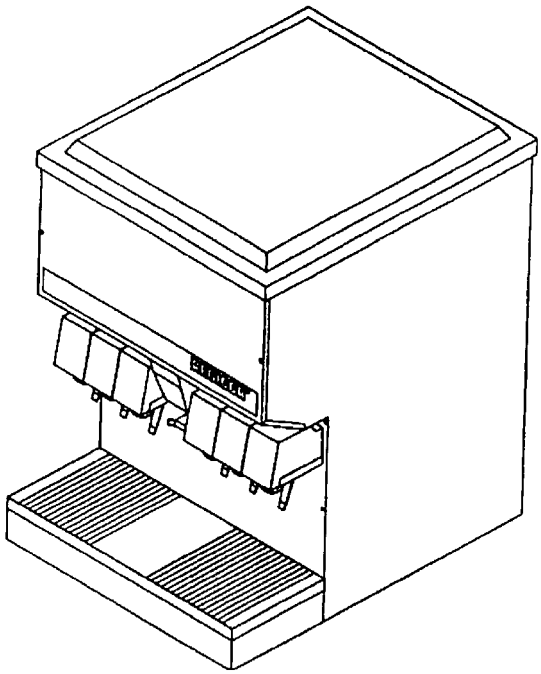
REMCOR®

ICE/BEVERAGE DISPENSER

MODEL NUMBERS
TJ45-B, TJ90-B, TJ90-BC

Operator's Manual



Part No. 90627
Date 11/3/96
Revision B

THIS DOCUMENT CONTAINS IMPORTANT INFORMATION
This Manual must be read and understood before installing or operating this equipment

â REMCOR INC: 1996

PRINTED IN U.S.A

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Manufactured Under One or More of the Following Patent Numbers:
3,211,336, 3,274,792, 3,393,839 , 3,517,860, 3,739,842, 4,215,803, 4,227,377, 4,300,3594,346,824
Canadian Patent Numbers912,514 (10/72), 936,855 (11,73), 4,429,543, 4,921,149
Other Patents Pending

SAFETY PRECAUTIONS

Always disconnect power to the dispenser before servicing or cleaning.

Never place hands inside of hopper or gate area without disconnecting power to the dispenser. Agitator rotation occurs automatically when dispenser is energized.

This ice dispenser has been specifically designed to provide protection against personal injury and eliminates contamination of ice. To insure continued protection and sanitation, observe the following:

1. **ALWAYS** be sure the removable lid is properly installed to prevent unauthorized access to the hopper interior and possible contamination of the ice.
2. **ALWAYS** be sure the upper and lower front panels are securely fastened.
3. **ALWAYS** keep area around the dispenser clean of ice cubes.

CAUTION: Dispenser cannot be used with crushed or flaked ice.

Use of bagged ice which has frozen into large chunks can void warranty. The dispenser agitator is not designed to be an ice crusher. Use of large chunks of ice which "jam up" inside the hopper will cause failure of the agitator motor and damage to the hopper. If bagged ice is used, it must be carefully and completely broken into small, cub-sized pieces before filling into the dispenser hopper

DESCRIPTION

The REMCORâ "TJ" series of ice dispensers solve your ice and beverage service needs the sanitary, space saving, economical way. Designed to be manually filled with ice from any remote ice making source, these dispensers will dispense cubes (up to 1" in size), cubelets and hard-chipped or cracked ice; and, in addition, several flavors of post-mix beverages. "B" models contain only beverage faucets and must be supplied with cold product from any remote cold plate of refrigerated soda factory. "BC" units include both faucets and cold plates designed to be supplied direct from syrup tanks and carbonator, with no additional cooling required.

SPECIFICATIONS

Model:	TJ45E/S–B*
Ice Storage:	45 lbs.
Maximum Number of Faucets Available:	4
Built-in Cold Plate:	No
Electrical:	120/1/60
Dimensions:	16" Wide x 22" Deep x 26-1/2" High

Model:	TJ90E/S-B*
Ice Storage:	90 lbs.
Maximum Number of Faucets Available:	6
Built-in Cold Plate:	No
Electrical:	120/1/60
Dimensions:	22" Wide x 28" Deep x 32" High

Model:	TJ90E/S-BC*
Ice Storage:	90 lbs.
Maximum Number of Faucets Available:	6
Built-in Cold Plate:	Yes
Electrical:	120/1/60
Dimensions:	22" wide x 28" Deep x 32" High

CABINETRY OPTIONS

E – Neutral Beige or White Baked Enamel finish with wood grain vinyl-clad upper front.

S – All Stainless Steel.

INSTALLATION INSTRUCTIONS

1. Locate the dispenser indoors on a level counter top. Unpack the four (4) legs and install them into the threaded holes provided in the bottom of the unit. The installer must provided flexibility in the product and utility lines to permit shifting the position of the dispenser sufficiently to clean the area beneath it.

2. Carefully pull the beverage tubes, drain lines and power cord through the large openings in the bottom of the unit. See figure 3, MOUNTING TEMPLATES, for locating the required clearance holes in the counter for these utility lines.

3. Connect the drain tube to an open drain. If additional piping is required, it must be 3/4" IPS (or equal) and must continuously pitch downward away from the unit and contain no "traps" or improper drainage will result.

4. Connect the beverage system product lines as indicated in Figure 4 ("B" units) and 5 ("BC" units). This work should be done by a qualified service person.

NOTE: that the hoses are marked with numbers (1 through 6) for syrup connections and "CW" for carbonated water connection.

5. Clean the hopper interior (see CLEANING INSTRUCTIONS).

6. Connect the power cord to a 120 volt, 60 cycle, 3-wire grounded receptacle.

SINK DRAIN ASSEMBLY

1. Use tube, clamp and insulation provided to assemble drain.

2. To assure proper drainage, do not allow "trap" to form in drain line. Be sure drain line runs flat with bottom of dispenser (see Figure 1)

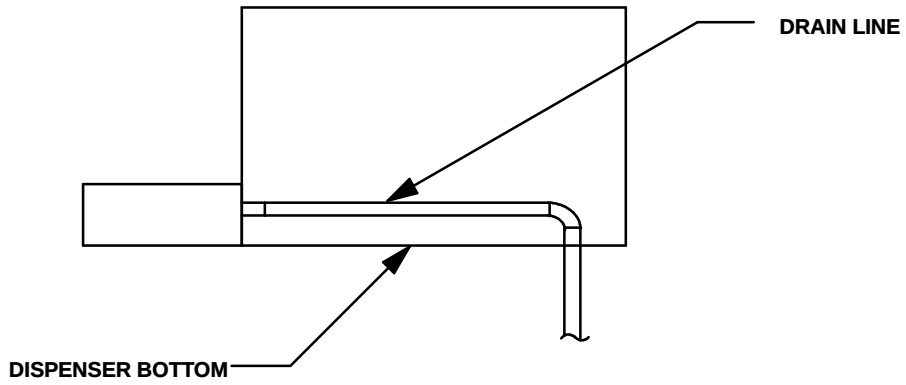


FIGURE 1. SINK DRAIN ASSEMBLY

CLEANING INSTRUCTIONS

WARNING: Disconnect power before cleaning. Do not use metal scrapers, sharp objects or abrasives on the surface of the liner, as damage may result. Do not use solvents or other cleaning agents, as they may attack the plastic liner.

DISPENSER

1. Clean the ice dispenser interior at least once a month.
2. Lift off agitator assembly and wash and rinse it thoroughly.
3. Wash down the inside of hopper and top cover with mild detergent solution and rinse thoroughly to remove all traces of detergent.
4. Replace agitator.
5. Sanitize the inside of hopper and agitator with a solution of 1 ounce of household bleach in 2 gallons of water. (200 PPM)
6. Remove ice chute cover as follows:
   A. Flex sides outward to disengage lower pins.
   B. Lift ice chute cover to disengage upper pins.
   C. Lower ice chute cover down out of unit. Note: it may be helpful to twist cover slightly.
7. With the brush provided, clean the inside of the ice chute with a mild detergent solution and rinse thoroughly to remove all traces of detergent.
8. Reverse above steps to reassembly ice chute.
9. Sanitize as described in Step 5.

COLD PLATE

1. Carefully remove the lower front panel of the ice dispenser.
2. Remove cold plate cover by lifting slightly in front and slide forward.
3. Wash down the inside of the cold plate, tray and cover with mild detergent solution and rinse. A small, long-handled brush will be found helpful in reaching the corners.
4. Replace the cover, taking care that it is securely positioned in cold plate tray.
5. Replace and lower front panel, carefully feeding the tube and wires into the cabinet. Be sure not to pinch any tubing or wires between the panel and cabinet.

BEVERAGE SYSTEM

1. Remove faucet spouts, wash in mild detergent, rinse and replace.
2. Disconnect electrical power to the carbonator. Shut off the water supply and close the CO_2 regulator to the carbonator.

3. Disconnect the syrup tanks from the system.

4. Energize the beverage faucets to purge the remaining soda water in the system.

5. Use a clean 5 gallon tank for each of the following:

   A. Cleaning Tank – Fill with hot (120° – 140°) potable water.

   B. Sanitation Tank – Fil with a chlorine sanitizing solution in the strength of 1 ounce of household bleach (sodium hypochlorite) to 2 gallons of cold (ambient) potable water (200PPM).

6. Repeat the following procedure on each of the unit's syrup product lines.

   A. Connect the cleaning tank to the syrup line to be sanitized and to the CO_2 system.

   B. Energize the beverage faucet until the liquid dispensed is free of any syrup.

   C. Disconnect the cleaning tank and hook-up the sanitizing tank to the syrup line and CO_2 system.

   D. Energize the beverage faucet until the chlorine sanitizing solution is dispensed through the faucet. Flush at least 2 cups of liquid to insure that the sanitizing solution has filled the entire length of the syrup line.

   E. Disconnect the sanitizing tank. Hook up the product tank to the syrup line and to the CO_2 system.

   F. Energize the faucet to flush the sanitizing solution from the syrup line and faucet. Continue draw on faucet until only syrup is dispensed.

7. Repeat Step 2 in reverse order to turn on the carbonator. Dispense at lease 1 cup of beverage from each faucet. Check taste, continue to flush, if needed, to obtain satisfactory tasting drink.

SERVICE AND MAINTENANCE

CAUTION: Disconnect power to dispenser before installing, removing or adjusting this kit.

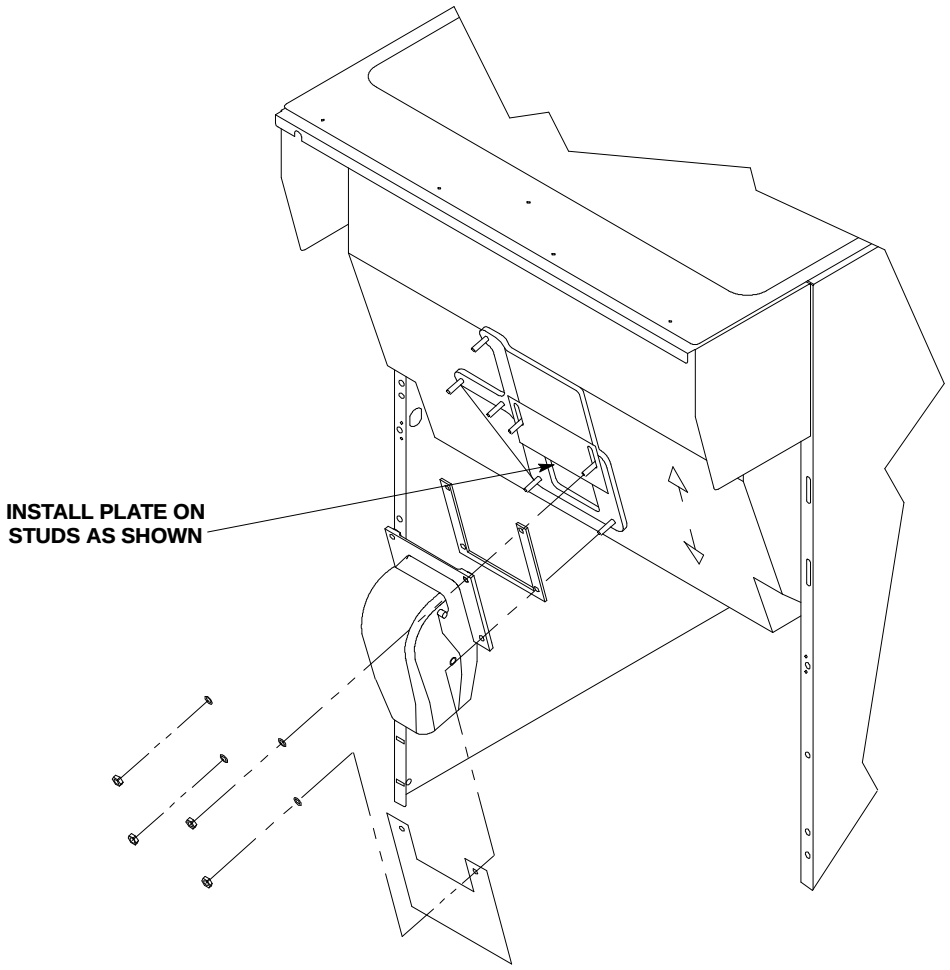


FIGURE 2. GATE RESTRICTOR PLATE

ADJUSTMENTS

This dispenser is provided with a gate restrictor plate, installed in it highest position. This plate adjusts the rate of ice flow from the dispenser. In applications using buckets, carefes or other large containers, the plate may be removed entirely for maximum ice flow. For glasses and cups, the plate may be adjusted downward to reduce the flow of ice. The best position depends on the type of ice being used and the size container and must be found by trial and error. Adjustment is made by loosening the upper two ice chute retaining nuts, sliding the restrictor plate to the desired position and re-tightening the nuts.

MAINTENANCE

The following dispenser maintenance should be performed at the intervals indicated:

DAILY (OR AS REQUIRED)

Remove foreign material from vending area sink to prevent drain blockage.

WEEKLY (OR AS REQUIRED)

Clean the vending area. Check for proper water drainage from the vending area sink.

MONTHLY

Clean and sanitize the hopper interior (see CLEANING INSTRUCTIONS).

If the dispenser fails to dispense ice when operated, check that the hopper has ice in it and that power is being supplied to the unit. If the problem persists, check the following.

1. Determine if the agitator is rotating (check for the sound of ice movement in the hopper).
2. Observe whether the gate is operating.

After checking the above, refer to the TROUBLESHOOTING GUIDE for possible problem causes and corrective action.

START-UP AND OPERATING INSTRUCTIONS

Fill the hopper with ice. For units with a built-in cold plate, dispense several large cups of ice (approximately 20 to 30 seconds total dispensing time) to allow ice to fill the cold plate cabinet. Add ice to the hopper as necessary to refill and replace the lid. Allow 10 to 15 minutes for the cold plate to cool down. Repeat this procedure whenever the dispenser has been standing over night or other long periods without ice use. Start up the beverage system and adjust faucets to the proper brix. Contact your local syrup distributor for complete information on the beverage system.

In normal operation, pushing the ice dispenser lever will cause ice to flow from the ice chute. Ice flow will continue until the lever is released. Pushing the lever on any faucet will provide beverage of the appropriate flavor.

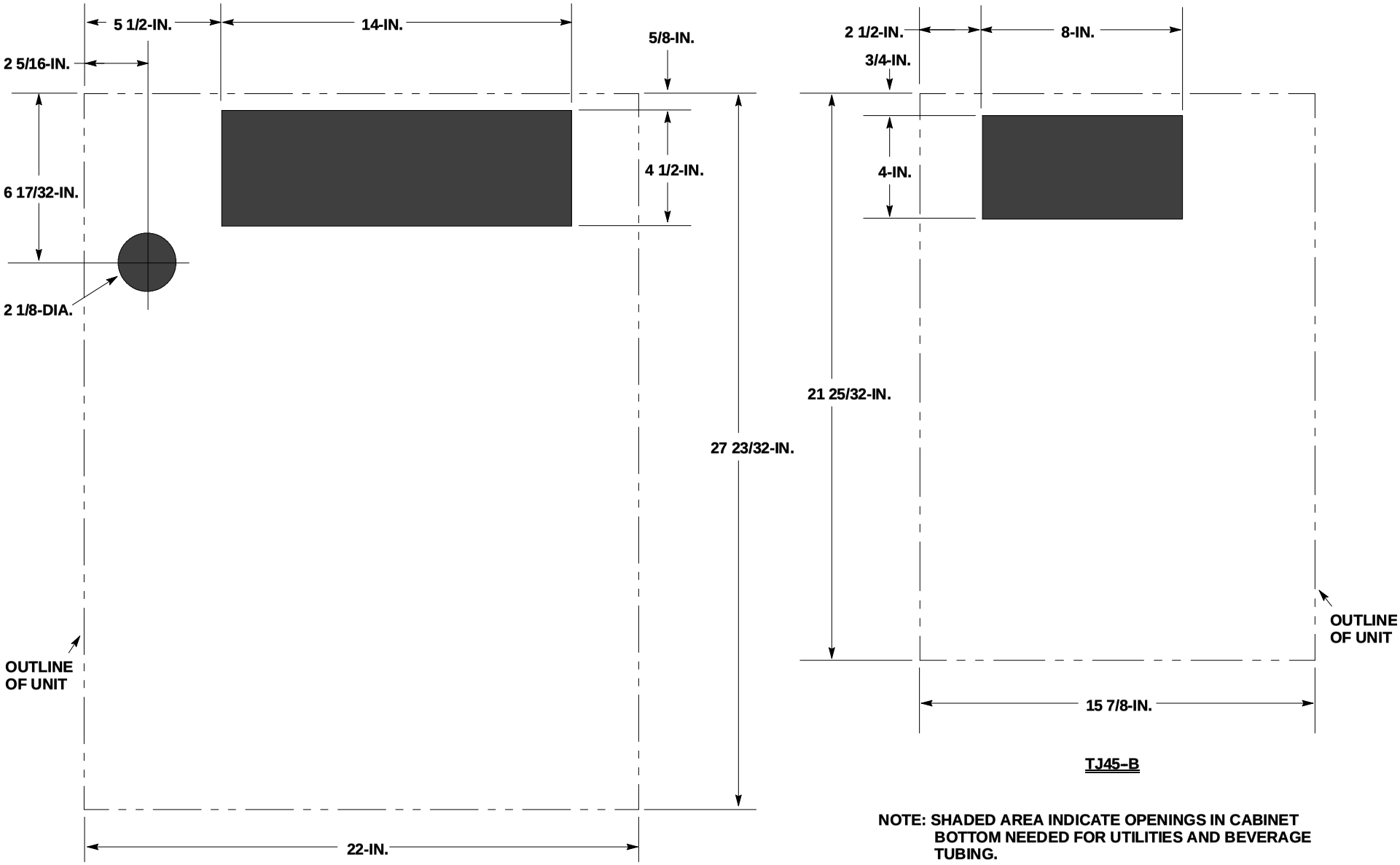
NOTE: Use caution to avoid spilling ice when filling dispenser. Immediately clean up any spilled ice from filling or operation of the unit. To prevent contamination of ice, the lid must be installed on the unit at all times.

TROUBLESHOOTING GUIDE

Should your unit fail to operate properly, check that there is power to the unit and that the hopper contains ice. If the unit still does not dispense, check the following chart under the appropriate symptoms to aid in locating the defect.

Trouble	Probable Cause
BLOWN FUSE OR CIRCUIT BREAKER.	A. Short circuit in wiring.
	B. Defective gate solenoid.
	C. Defective agitator motor.
GATE DOES NOT OPEN. AGITATOR DOES NOT TURN.	A. No power.
	B. Bent depressor plate (does not actuate switch).
	C. Defective dispensing switch.
GATE DOES NOT OPEN OR IS SLUGGISH. AGITATOR TURNS.	A. Defective gate solenoid.
	B. Weak gate spring.
	C. Excessive pressure against gate slide.
GATE OPENS. AGITATOR DOES NOT TURN.	A. Ice solidified in hopper.
	B. Defective agitator motor.
	C. Defective capacitor (TJ90 only).
ICE DISPENSES CONTINUOUSLY.	A. Stuck or bent depressor plate (does not release switch).
	B. Defective dispensing switch.
	C. Improper switch installation.
SLUSHY ICE. WATER IN HOPPER.	A. Blocked drain.
	B. Unit not level.
BEVERAGES DO NOT DISPENSE.	A. No 24 volt power to faucets.
	B. No CO_2 pressure.
BEVERAGES TO SWEET.	A. Carbonator not working.
	B. No CO_2 pressure in carbonator.
	C. Faucet brix requires adjusting.
BEVERAGES NOT SWEET ENOUGH.	A. Empty syrup tank.
	B. Faucet brix requires adjusting.
BEVERAGES NOT COLD (UNITS WITH BUILT-IN COLD PLATE).	A. No ice in cold plate cabinet due to reduced ice demand.

NOTE: contact your local syrup or beverage equipment distributor for additional information and troubleshooting of beverage system.



TJ90–B, BC

TJ45–B

NOTE: SHADED AREA INDICATE OPENINGS IN CABINET BOTTOM NEEDED FOR UTILITIES AND BEVERAGE TUBING.

FIGURE 3. MOUNTING TEMPLATE

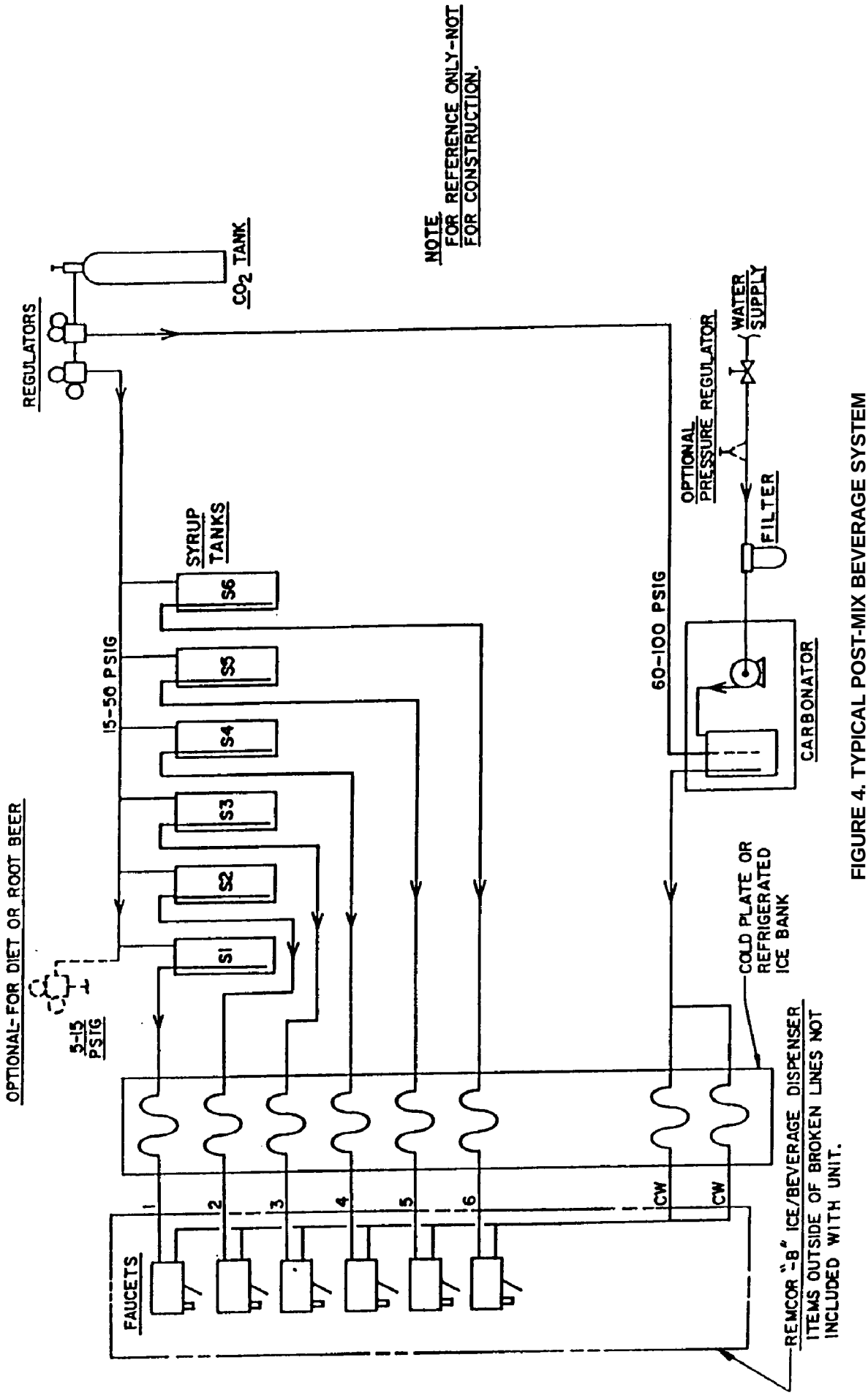
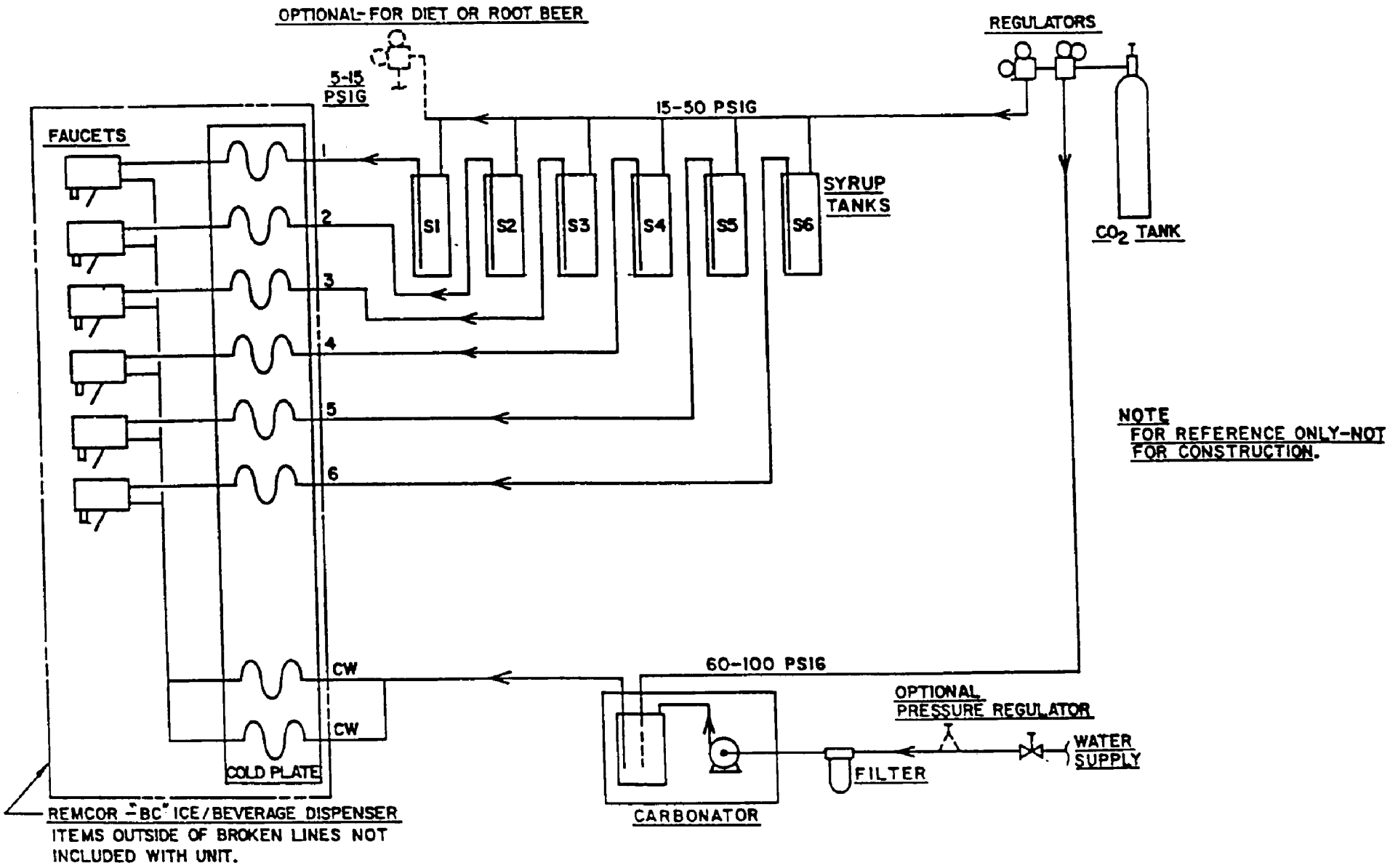
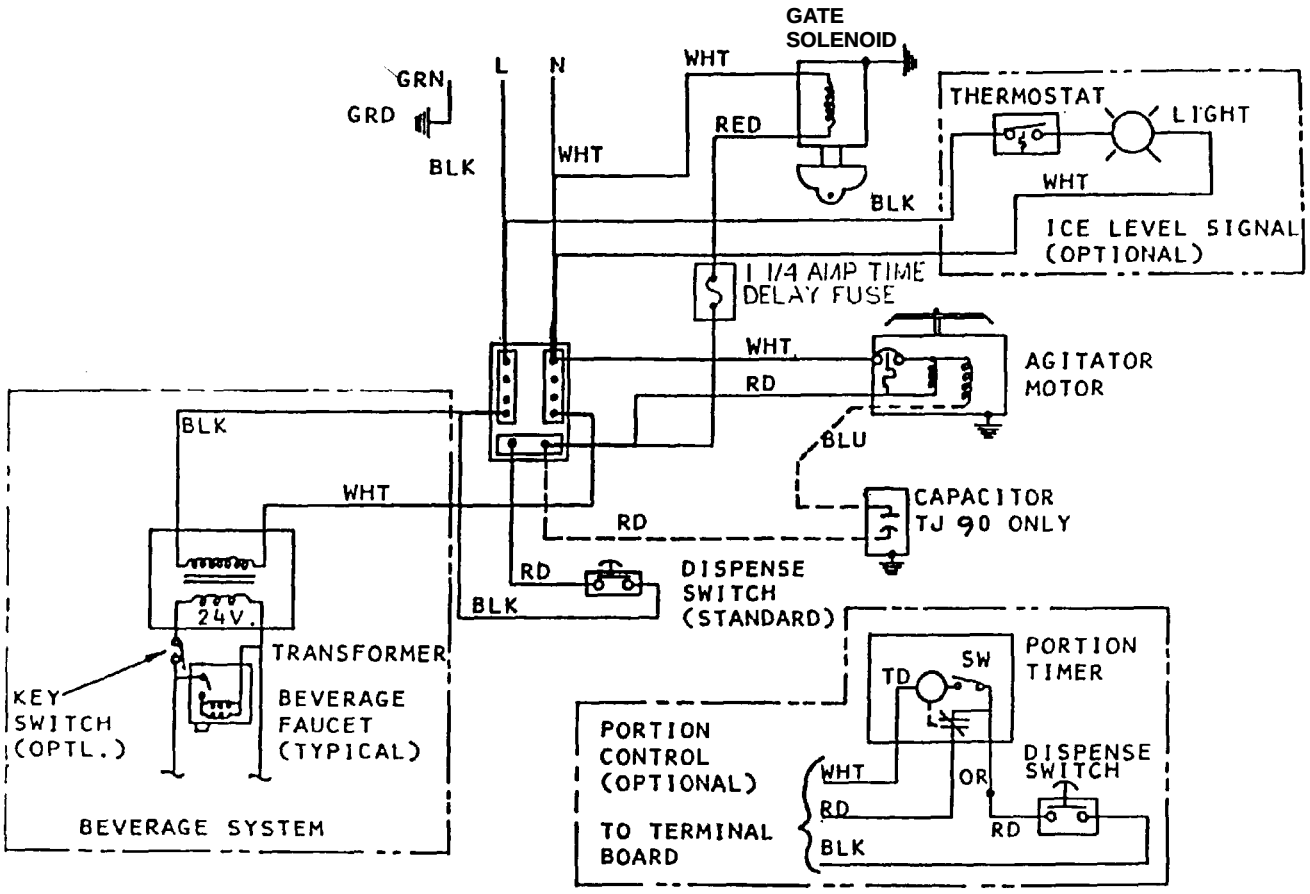


FIGURE 4. TYPICAL POST-MIX BEVERAGE SYSTEM SCHEMATIC "-B" DISPENSER

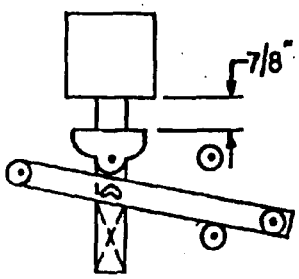


SCHEMATIC "-BC" DISPENSER

DANGER: ELECTRIC SHOCK HAZARD. DISCONNECT POWER BEFORE SERVICING UNIT.



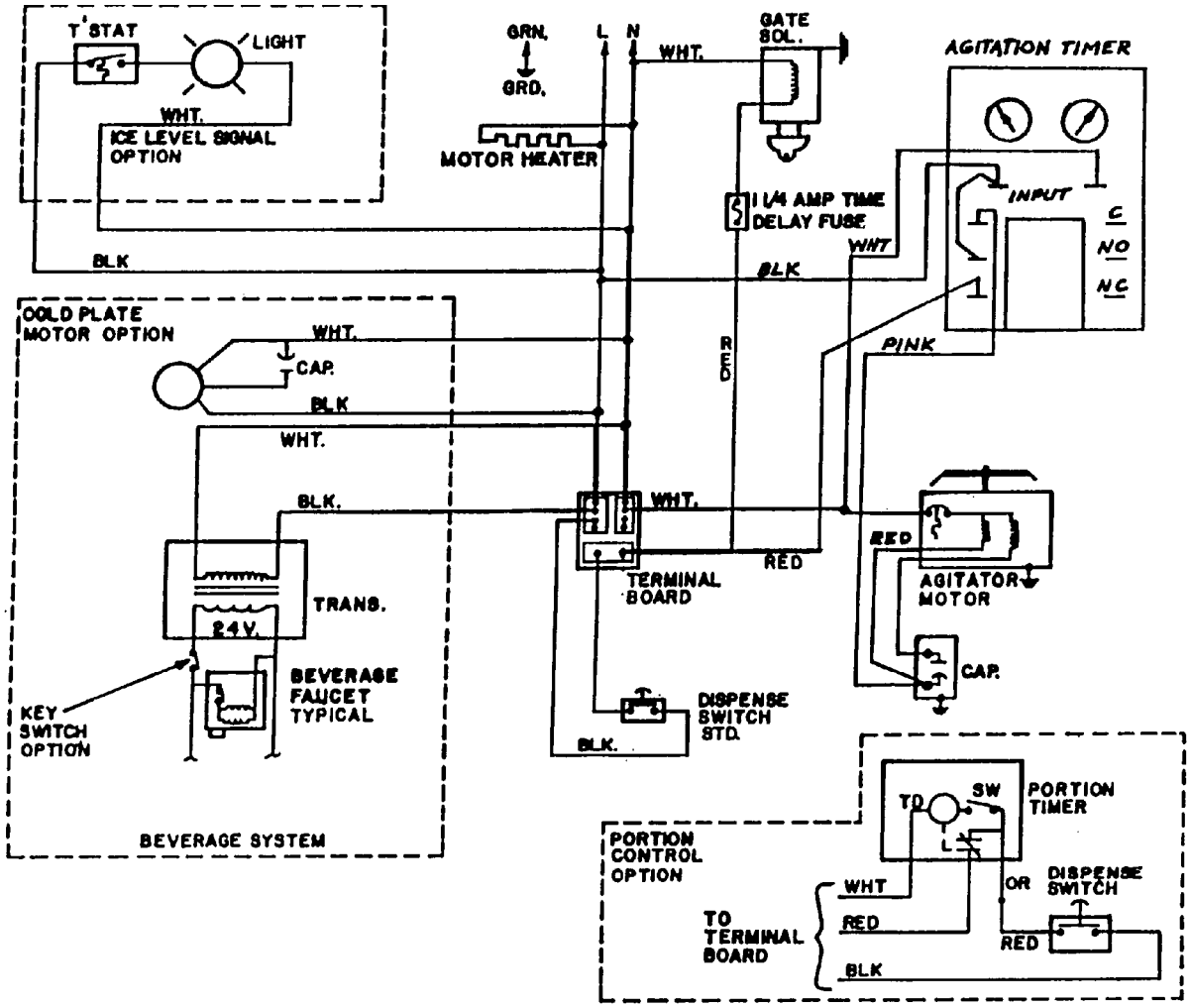
SOLENOID ADJUSTMENT



WHEN REPLACING SOLENOID ADJUST TO 7/8" AS SHOWN BEFORE TIGHTENING MOUNTING SCREWS.

FIGURE 6. TJ45,90 DISPENSER WIRING DIAGRAM

DANGER: ELECTRIC SHOCK HAZARD. DISCONNECT POWER BEFORE SERVICING UNIT.



SOLENOID ADJUSTMENT

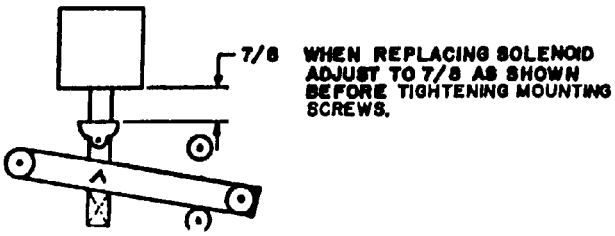


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FIGURE 7. TJ90–BC DISPENSER WIRING DIAGRAM

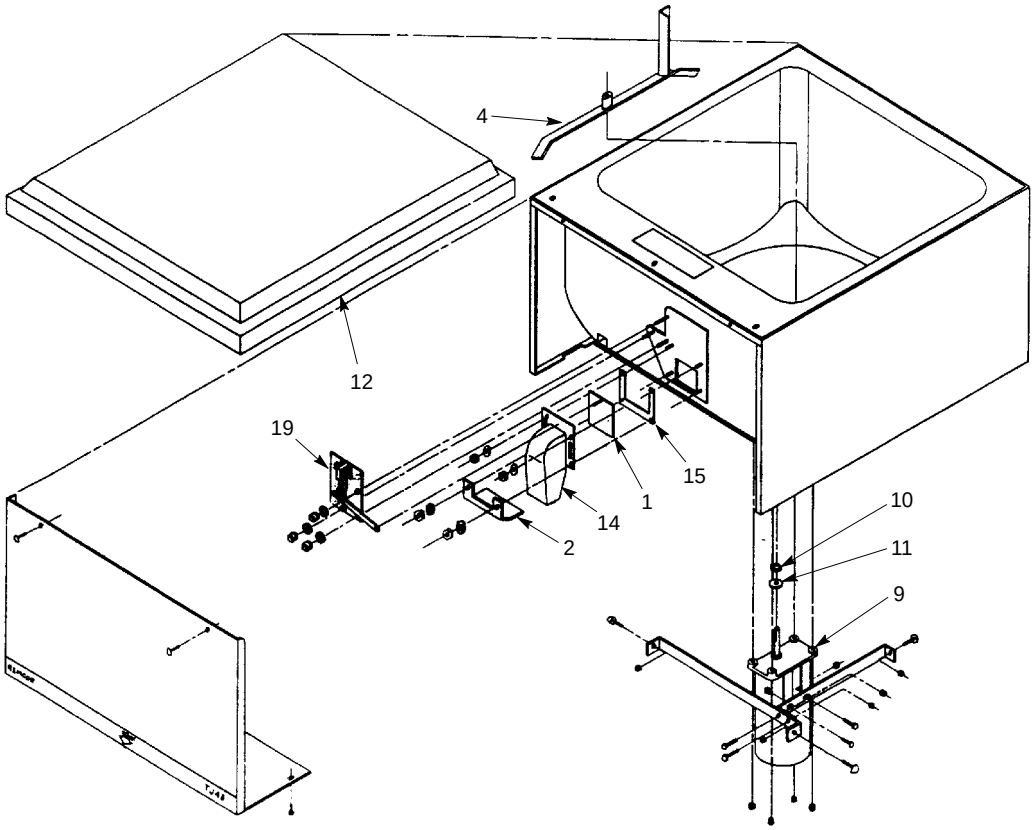


FIGURE 8 UPPER SECTION EXPLODED VIEW TJ45

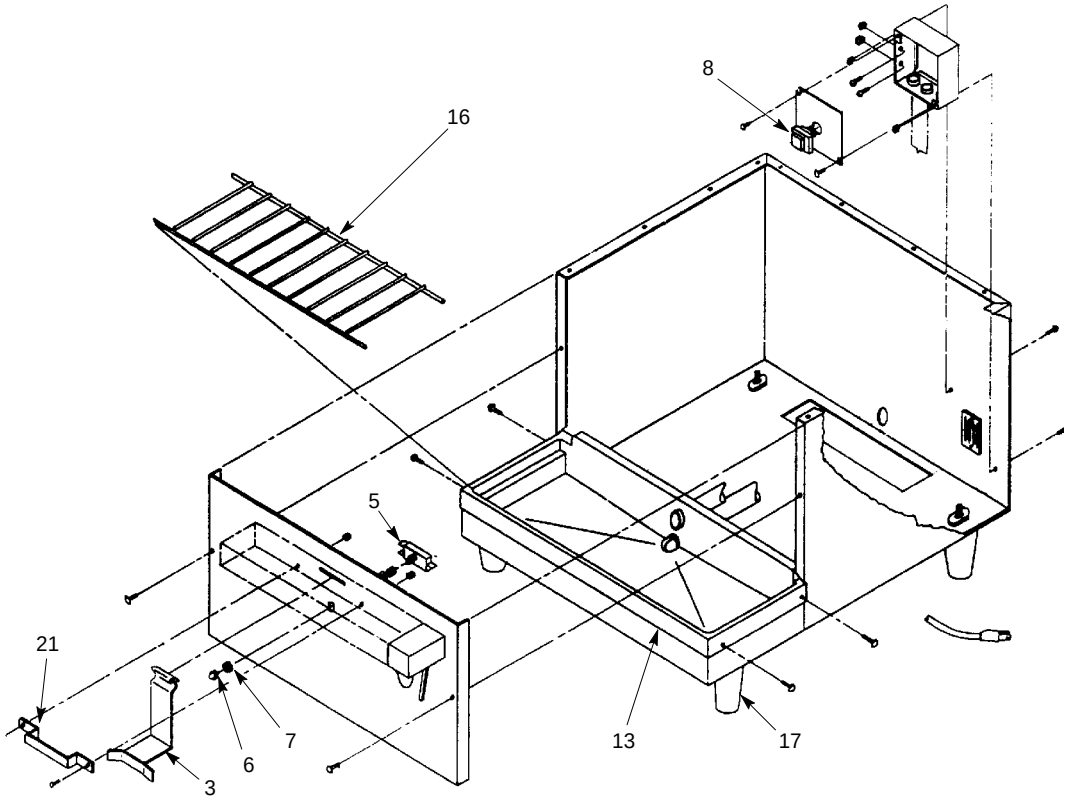


FIGURE 9 EXPLODED VIEW LOWER SECTION TJ45

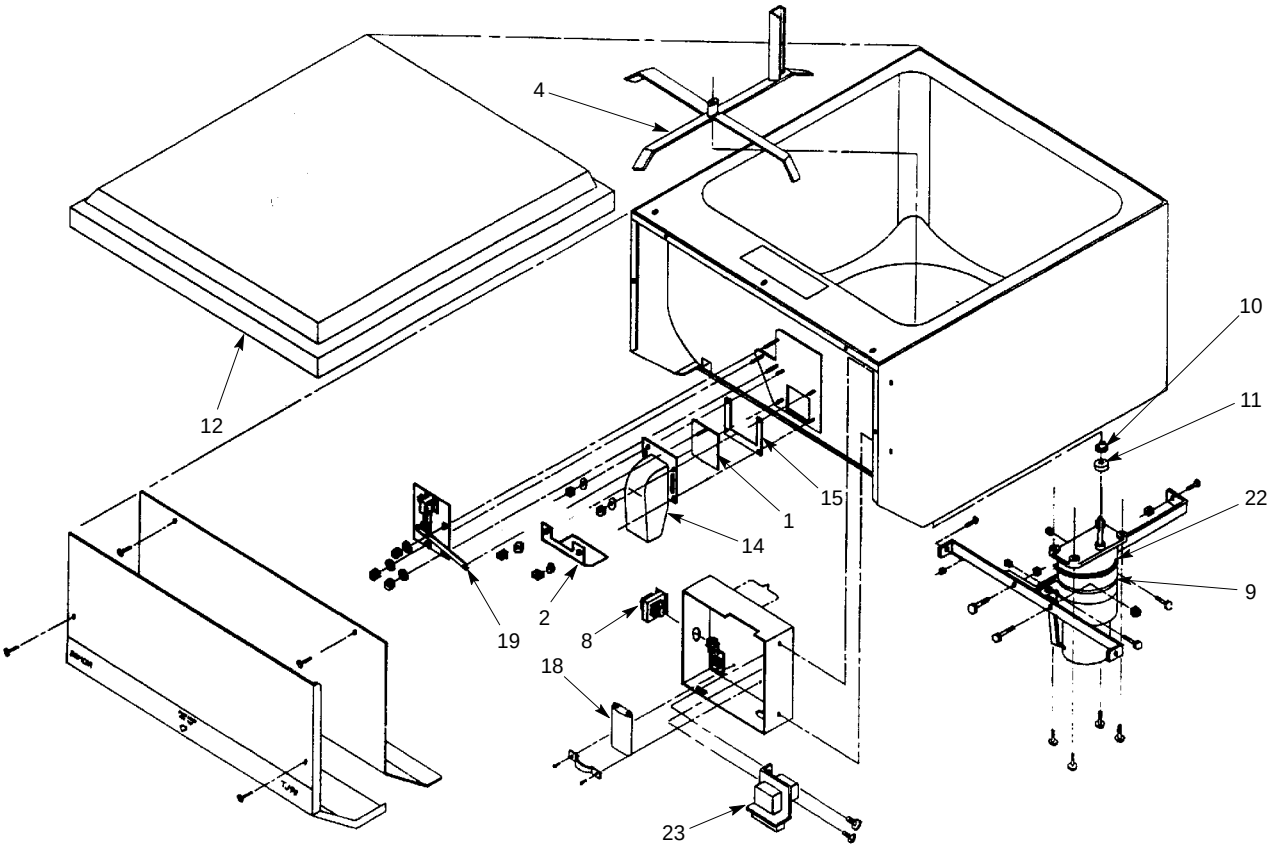


FIGURE 10 EXPLODED VIEW UPPER SECTION TJ90

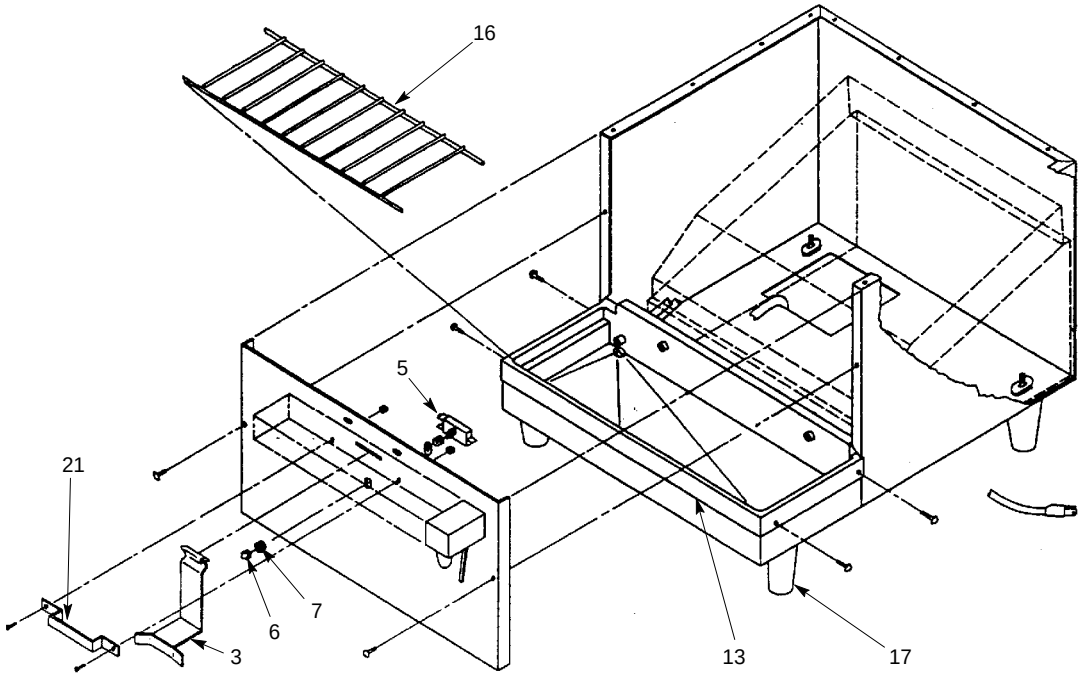


FIGURE 11 EXPLODED VIEW LOWER SECTION TJ90

FINAL ASSEMBLY PARTS LIST

Item No.	Part No. TJ45 "B"	Part No. TJ90 "B", "BC"	Description
1	21491	21491	Gate Slide
2	23062	23062	Foam Shield
3	21515	21515	Depressor Lever
4	21517	21629	Agitator ("B" Models Only)
	–––––	21854	Agitator ("BC" Models Only)
5	30895	30895	Dispense Switch
6	31007	31007	Switch Boot
7	31163	31163	Switch Insert
8	31091	31091	Transformer
9	31106	31112	Agitator Motor
10	50454	50454	Motor Shaft Seal
11	50481	50806	Motor Gasket
12	50748	50791	Lid ("B" "BC")
13	50750	50793	Sink ("B", Models Only)
	–––––	51019	("BC" Models Only)
14	53015	53015	Ice Chute Back Section
	53016	53016	Ice Chute Cover
15	50770	50770	Gate Gasket
16	70343	70441	Sink Grill
17	70419	70419	Leg
	–––––	70439	Leg ("BC" Models Only)
18	–––––	30774	Capacitor
19	31093	31093	Solenoid Assembly
20	70438	70438	Rebuilding Kit
21	22644	22644	Depressor Retainer
22	–––––	30794	Agitation Motor Heater ("B", "KBC" Models Only)
23	–––––	31763	Agitation Timer ("BC", "KBC" Models Only)

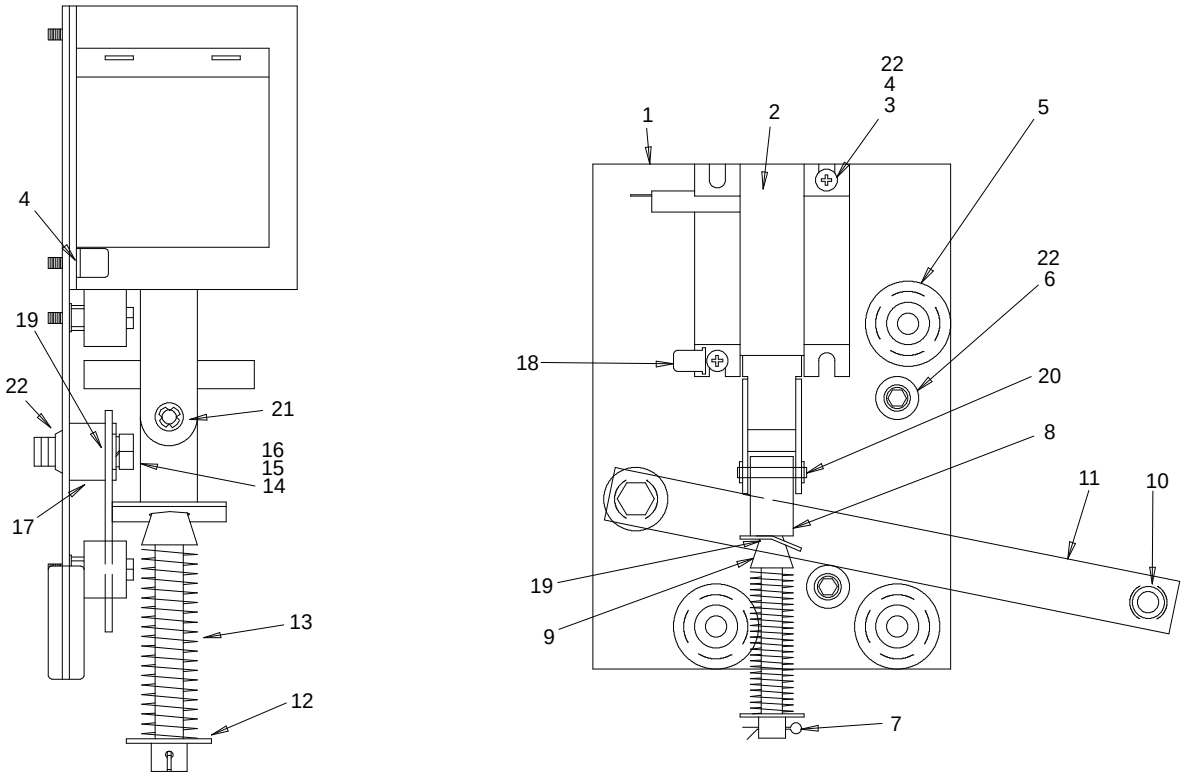


FIGURE 12. SOLENOID ASSEMBLY

Index No.	Part No.	Qty.	Name
1	21493	1	Solenoid Mounting Plate
2#	31551	1	Solenoid Service Kit
3	70171	2	8–32 x 3/8 Phil Tr HD Screw
4	70121	2	No. 8 Lockwasher
5	50752	3	Isolator
6*	50789	2	Bumper Assembly
7*	70423	1	Cotter Pin
8*	10080	1	Gate Lift Rod
9	10081	1	Gate Lift Rod Bushing
10	50754	1	Gate Arm Bearing
11	21492	1	Gate lift Arm
12	70043	1	Flatwasher
13*	70422	1	Spring
14	70263	1	1/4-20 x 3/4 Hex Hd Screw
15	70048	1	1/4 Lockwasher
16	70066	1	1/4 Flatwasher
17	10077	1	Pivot Bearing
18	30227	1	1/4 Quick Connect Tab
19	50305	––	Lubricant
20*	21592	1	Solenoid Linkage Pin
21*	70433	2	Retainer Ring
22	51088	––	Loctite
––*	70438	––	Rebuilding Kit

NOTE: * Parts supplied with rebuilding kit.
 # 31551 solenoid supplied with items 20 & 21.

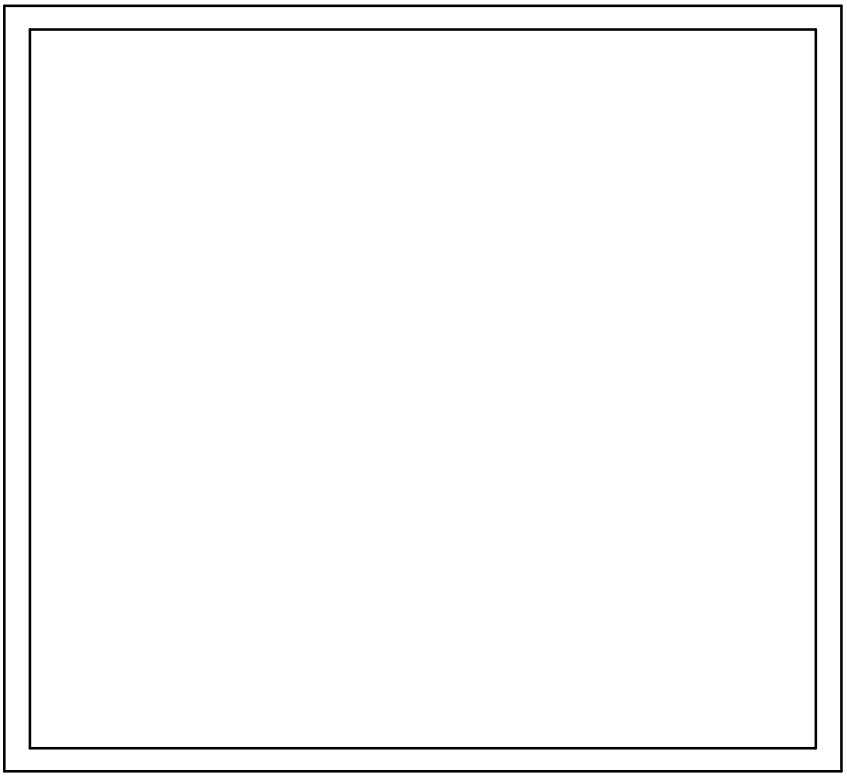
IMI CORNELIUS INC.
ONE CORNELIUS PLACE
ANOKA, MN. 55303–6234
TELEPHONE (800) 238–3600
FACSIMILE (612) 422–3232
TECH SVC 1-800-535-4240

WARRANTY

IMI Cornelius Inc. and Remcor Products Company warrants that all equipment and parts are free from defects in material and workmanship under normal use and service. For a copy of the warranty applicable to your Cornelius and or Remcor product, in your country, please write, fax or telephone the IMI Cornelius office nearest you. Please provide the equipment model number, serial number and the date of purchase.

IMI Cornelius Offices

AUSTRALIA ● P.O. 210, ● RIVERWOOD, ● NSW 2210, AUSTRALIA ● (61) 2 533 3122 ● FAX (61) 2 534 2166
AUSTRIA ● AM LANGEN FELDE 32 ● A-1222 ● VIENNA, AUSTRIA ● (43) 1 233 520 ● FAX (43) 1-2335-2930
BELGIUM ● BOSKAPELLEI 122 ● B-2930 BRAASCHAAT, BELGIUM ● (32) 3 664 0552 ● FAX (32) 3 665 2307
BRAZIL ● RUA ITAOCARA 97 ● TOMAS COELHO ● RIO DE JANEIRO, BRAZIL ● (55) 21 591 7150 ● FAX (55) 21 593 1829
ENGLAND ● TYTHING ROAD ALCESTER ● WARWICKSHIRE, B49 6 EU, ENGLAND ● (44) 789 763 101 ● FAX (44) 789 763 644
FRANCE ● 71 ROUTE DE ST. DENIS ● F-95170 DEUIL LA BARRE ● PARIS, FRANCE ● (33) 1 34 28 6200 ● FAX (33) 1 34 28 6201
GERMANY ● CARL LEVERKUS STRASSE 15 ● D-4018 LANGENFELD, GERMANY ● (49) 2173 7930 ● FAX (49) 2173 77 438
GREECE ● 488 MESSOGION AVENUE ● AGIA PARASKEVI ● 153 42 ● ATHENS, GREECE ● (30) 1 600 1073 ● FAX (30) 1 601 2491
HONG KONG ● 1104 TAIKOTSUI CENTRE ● 11-15 KOK CHEUNG ST ● TAIKOKTSUE, HONG KONG ● (852) 789 9882 ● FAX (852) 391 6222
ITALY ● VIA PELLIZZARI 11 ● 1-20059 ● VIMARCATE, ITALY ● (39) 39 608 0817 ● FAX (39) 39 608 0814
NEW ZEALAND ● 20 LANSFORD CRES. ● P.O. BOX 19-044 AVONDALE ● AUCKLAND 7, NEW ZEALAND ● (64) 9 8200 357 ● FAX (64) 9 8200 361
SINGAPORE ● 16 TUAS STREET ● SINGAPORE 2263 ● (65) 862 5542 ● FAX (65) 862 5604
SPAIN ● POLIGONO INDUSTRAIL ● RIERA DEL FONOLLAR ● E-08830 SANT BOI DE LLOBREGAT ● BARCELONA, SPAIN ● (34) 3 640 2839 ● FAX (34) 3 654 3379
USA ● ONE CORNELIUS PLACE ● ANOKA, MINNESOTA ● (612) 421-6120 ● FAX (612) 422-3255



IMI CORNELIUS INC.

Corporate Headquarters:

One Cornelius Place
Anoka, Minnesota 55303-6234
(612) 421-6120
(800) 238-3600